at Lake Placid (Archbold Biological Station), Florida, 1958–1964 (Holotype and Paratypes), during the months of November through January. In a note Dr. Frost wrote "104 specimens taken night of Jan. 4, 1964, very few taken before or afterwards." John Graham collected one specimen in a "Sticky band trap" in a "Beech woods" at Raleigh (Umstead Park), North Carolina, February 24, 1962, one specimen in a "cob web, Nov. 28, 1963" and one "in flight, Raleigh, N. C., Jan. 5, 1962." J. O. Pepper and B. F. Coon collected one specimen in a black light trap at Center Hall, Pa., Oct. 19–26, 1958. We do not know the host of this aphid.

TEN NEW CHRYSOMELID BEETLES FROM DOMINICA AND JAMAICA

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The following new species of Chrysomelidae, with one exception, were collected during the Bredin-Archbold Smithsonian Biological Survey in Dominica. A. B. Gurney on his way back from Dominica collected a new species of *Oedionychus* in Jamaica.

Habrophora thelmae, n. sp. (Fig. 1)

Elongate oblong oval, clothed with short, fine, appressed, yellow pubescence; head, prothorax and breast dull brown, elytra, abdomen and legs paler yellow brown, elytra with dark spot on basal umbone and a dark lateral stripe from humerus along side to middle, an irregular fascia across elytra at middle, also 3 inconspicuous costae on each elytron with dense striate punctures on each side of them, the intervals between confusedly punctate; antennae pale yellow brown with joints 7, 8, 10 and 11 dark.

Head with interocular space half width of head, eyes emarginate, occiput and front with fine yellow pubescence, an inconspicuous dark median line, clypeus with finely punctate surface not completely hidden by pubescence, labrum pale, jaws piceous. Antennae extending to middle of elytra, long and slender, pale yellow brown with distal joints dark. Prothorax densely covered with pale pubescence that hides the dense punctation; a transverse depression in basal half, convex with rounded sides and very thin line marking lateral margin, prosternum taken up with coxal cavities, between these a moderately wide median area. Scutellum densely pubescent. Elytra elongate, thinly covered with appressed yellow pubescence and with 3 somewhat inconspicuous costae edged on either side with a dense row of striate punctures, intervals with confused punctures;

a prominent basal umbone on each elytron and small prominent humeri with intrahumeral sulci; basal umbones deep brown, humeri and sides to middle also brown, at middle an irregular brown fascia across. Femora slightly enlarged, tibiae long and slender, claws toothed. Length 5.5 mm, width 2.2 mm.

Type, female, USNM 69718.

Type locality.—Pont Lolo, 1800 ft. alt., Dominica, Feb. 19, 1965, collected by J. F. G. and T. M. Clarke.

Remarks.—Although this species certainly belongs in an Eumolpid genus close to Fidia, Xanthonia and Habrophora, and especially the last, it differs from them by having the elytral punctation not definitely striate. As in Habrophora there are three elytral costae on each elytron, each having on each side a row of dense striate punctures. Because of these costae edged with striate punctures, I am putting it in the genus Habrophora, but it differs from the other species of the genus that I have examined in having distinctly confused punctation in the intervals and in having sparser elytral pubescence. I take pleasure in naming this after Mrs. J. F. G. Clarke, who did her share of the collecting on Dominica.

Alethaxius dominicae, n. sp. (Fig. 7)

Oblong oval, yellow brown with deeply and densely punctate head, prothorax and elytra, elytra with punctures somewhat confused in basal half, on sides and at apex striate punctures with costate intervals, much more pronounced in female.

Head with interocular space approximately half width of head, a median line down front, surface densely and deeply punctate, clypeus dull and alutaceous and separated from front by somewhat indistinct sulcus. Antennae extending below humeri, joints 7–11 darker and wider. Prothorax moderately convex with 2 angularities on each side, dull yellow brown, deeply and moderately densely punctate. Scutellum dark. Elytra with confused punctures in basal half from about scutellum to middle, on sides and below the middle in apical half striate rows of punctures with costate intervals, much more developed in female. Body beneath reddish brown, legs yellowish brown, not toothed. Length 2.3–2.7 mm; width 1–1.5 mm.

Type, male, USNM 69719.

Type locality.—Clarke Hall, Dominica, Feb. 4–7, 1965, H. E. Evans. Other locality.—½ mile west of Pont Lolo, 1800 ft. alt., Dominica, Feb. 19, 1965, J. F. G. and T. M. Clarke.

Remarks.—In size and coloration this is very much like A. puertoricensis Blake, but lacks the knobby projections on the elytra, especially noticeable in the female of that species, although even the male
has a few knobs about the humeri. In this species the female has
very strongly developed costae that in the male are noticeable on the
sides and apex. The single female was collected farther up the
mountain but in the same general area, and there is no question it
is the same species.

Metachroma gagnei, n. sp. (Fig. 6)

Oblong oval, shining, yellow brown with reddish brown basal and 2 lateral spots on each elytron; striate punctures on elytra feeble over basal callosities, fading away on sides and at apex; pronotum impunctate; antennae with apical joints darker.

Head with interocular space less than half width of head, occiput and front nearly impunctate, a transverse sulcus between antennal sockets, clypeus nearly impunctate. Antennae long and slender with apical joints thicker and darker. Prothorax evenly rounded but not very convex with rounded lateral sides and depression over head; mirror smooth, yellow brown. Scutellum reddish brown. Elytra with striate punctures nearly obsolete over basal callosities and indistinct on sides and at apex; a median long reddish brown basal spot on each elytron and 2 others along the side, one below humerus, the other, larger, at about the middle. Body beneath yellow brown, shining, legs pale, femora not toothed. Length 2.5 mm; width 1.3 mm.

Type, female, USNM 69720.

Type locality.—Path to Cabrits, Dominica, 2 April 1966, R. J. Gagne. Remarks.—There is only one specimen of this small species which is about the size of M. testaceum Blatchley from the tip of Florida and Cuba. It is the smallest species of Metachroma from Dominica yet collected and rather distinctively marked with the reddish brown elytral spotting.

Galerucella brevivittata, n. sp. (Fig. 2)

Elongate with short prothorax and long, parallel-sided elytra, dull yellowish brown with dark head, prothorax with a diagonal dark mark on either side, elytra with 6 deeper brown vittae and brown sutural edges, the median vittae not reaching base or apex, all covered with very short fine pubescence.

Head with wide set eyes and a median line down occiput to interantennal area, little evidence of tubercles or frontal carina, lower front short and somewhat depressed, occiput and mouthparts dark. Antennae extending below humeri, 2 basal joints rather inflated, 3rd joint longest of all, remainder diminishing and somewhat wider, with base pale, apex dark, apical 3 joints entirely dark. Prothorax transverse with sides and median anterior area depressed, at each angle a small tooth, dull yellow brown with piceous diagonal plaga on each side, surface finely and densely punctate with a few short hairs. Scutellum dark. Elytra elongate, parallel-sided with prominent humeri and short intrahumeral sulcus, depressed below scutellum, surface finely punctate and covered with short fine yellowish pubescence, closely appressed; yellow brown with darker sutural edges, and on each elytron 2 median dark brown vittae, 1 from the scutellum, the other from end of intrahumeral sulcus, not reaching base or apex, a 3rd from the humerus. Body beneath dark except for pale yellow brown prosternum, and somewhat darker legs. Length 5.2 mm; width 2.5 mm.

Type, male, USNM 69721 and four paratypes.

Type locality.—Clarke Hall Estate, Dominica, May 31, 1966, G. Steyskal. Feb. 4–7, 1965, H. E. Evans.

Other localities.—3 m. w. Pont Lolo, 1800 ft. alt. Feb. 19, 1965,

J. F. G. and T. M. Clarke.

Remarks.—This is another of the species of West Indian Galerucella with long, vittate elytra. In this one the median vittae do not reach entirely from base to apex. Other vittate species closely resembling it but differing in the vittae are G. jamaicensis Blake, G. melanocephala Blake, G. maculipes Blake, and G. oteroi Blake, the last three from Cuba.

Oedionychus gurneyi, n. sp. (Fig. 3)

Elongate oblong oval, shining, nearly impunctate, rather flat with wide explanate margin, yellow brown, pronotum with wide piceous vitta curving on the inner side on each side near explanate margin, elytra with a piceous marking covering humerus and extending below middle, across apex an irregular piceous band.

Head with interocular space less than half width of head, yellowish brown with well developed frontal tubercles, a short carina and short lower front; fine punctures over upper face. Antennae yellow brown with apical joints deeper in coloring, slender, not reaching middle of elytra. Prothorax nearly flat with wide explanate margin, yellow brown with a wide curving piceous vitta on each side; surface shining with almost imperceptible fine punctures. Scutellum triangular, pale. Elytra long, wider than prothorax, with wide explanate margin and about 5 times as long as prothorax; shining pale yellow brown with irregular piceous marking from humerus to beyond middle, before apex a narrow irregular band nearly across elytra. Body beneath and legs pale yellow brown. Length 6.8 mm; width 3.3 mm.

Type, female, USNM 69722 and one paratype, female.

Type locality.—Green Hills, Portland Parish, ca. 3800 ft. alt., Nov.

13–20, 1966, A. B. Gurney.

Remarks.—The dark piceous markings on the pronotum and elytra are unlike those of any other species of *Oedionychus* found in the West Indies, and because of the high mountain region in which it was collected, I believe it is endemic in Jamaica. I take pleasure in naming it for its collector, Dr. Gurney.

Hadropoda xanthoura, n. sp.

(Fig. 9)

Elongate oblong oval, reddish or yellowish brown, densely covered with short fine golden and brown pubescence, prothorax only a little wider than long with nearly straight sides, elytra much wider than prothorax with striate punctation more or less covered by pubescence, an irregular brownish fascia below middle made by short brown pubescence, which is also present on basal callosities; apex densely clothed with yellow pubescence.

Head brownish with interocular space less than half width of head, eyes large, face long, a deep linear depression above carina between absent frontal tubercles, carina between closely set antennal sockets very narrow and short, lower front depressed, occiput covered with short pale pubescence. Antennae filiform, basal and 2nd joints swollen, 3rd joint long and slender, longer than 4th or 5th which

are subequal, 6th shorter, 7–10th shorter and wider and tending to be darker. Prothorax only slightly wider than long, convex with a hump in middle and depressed in basal part; pale yellowish brown covered with fine, appressed, short pubescence. Scutellum pale and with fine pubescence. Elytra much wider than prothorax, regularly striate punctate, with strong basal callosities, surface covered more or less by fine, short, appressed pubescence that over basal callosities tends to be deep brown and also an irregular brown fascia of brown pubescence across elytra in apical half, rest of elytra with short golden pubescence. Body beneath and legs pale yellowish or reddish brown, less densely pubescent. Length 3.9–4.2 mm; width 3.6–1.8 mm.

Type, male, USNM 69723.

Type locality.—2.5 m east of Pont Casse, Dominica, Jan. 16, 1965, W. W. Wirth.

Other localities.—Freshwater Lake, 21 Jan. 1965, W. W. Wirth; Springfield Estate, 20 July 1963, O. S. Flint, Jr.; S. Chiltern Estate, 20 Feb. 1965, W. W. Wirth.

Remarks.—This is unlike any other species of *Hadropoda* in the markings. It resembles somewhat *H. calva* Blake from the Dominican Republic, but that species has the occiput devoid of pubescence.

Lactica flinti, n. sp.

(Fig. 4)

Elongate oblong oval, shining, nearly impunctate, pale reddish brown with antennae except 2 basal joints and tarsi except 1st joint of hind one dark, a dark reddish brown spot on either side of pronotum.

Head with interocular space more than half width of head, a large puncture surrounded by several smaller ones on either side near eye, frontal tubercles rather indistinct and a very short carina, lower front depressed. Antennae long and except for 2 basal joints dark. Prothorax with slightly rounded sides and a feebly marked basal sulcus, on either side a deeper reddish brown spot; surface shining, minutely punctate. Scutellum pale. Elytra elongate, with small sharp humeri, a short intrahumeral sulcus and faint umbone at base; shining, reddish brown, not visibly punctate. Body beneath shining reddish brown with few punctures and nearly glabrous, legs reddish brown except for black tarsi, and the first joint of hind tarsi not dark. Length 3.5–3.7 mm; width 1.8 mm.

Type, male, and one paratype, female, USNM 69724.

Type locality.—.4 mile E. of Pont Casse, collected May 6 and June 23, 1964, O. S. Flint, Jr.

Remarks.—Dr. Flint tells me these beetles were taken at about 2000 ft. altitude, at the beginning of the rain forest. I have already described one other pale species of Lactica from Dominica, collected at 800 ft. altitude by R. G. Fennah. L. flinti differs from this one in coloration having only the tarsal joints dark, and also in having two spots on the pronotum. This pronotal spotting is unlike any up to now found in these pale species from the West Indies. The basal sulcus on the pronotum is also feebler in comparison with the rest.

Heikertingerella wirthi, n. sp. (Fig. 10)

Ovate, shining yellow brown, finely punctate, last 5 joints of antennae deeper brown.

Head with interocular space less than half width of head, eyes very large, interantennal area narrow and produced in a long carina extending down front, deep brown. Antennae with 2 basal joints swollen, 3rd short, remainder long, subequal and filiform, last 5 or 6 joints deeper brown. Prothorax yellowish or even reddish brown, minutely punctate, sides contracting in a straight line towards eye, basal margin sinuate over scutellum. Scutellum yellowish or reddish brown. Elytra convex, widest at middle, with small humeri, surface moderately shiny, finely punctate, yellowish brown. Body beneath and legs yellowish or reddish brown. Length 2.2–2.9 mm; width 1.5–1.8 mm.

Type, male, USNM 69725 and four paratypes.

Type locality.—Freshwater Lake, Dominica, April 14, 1964, O. S. Flint, Jr.

Other localities.—Clarke Hall, 11–20 March 1965, W. W. Wirth; Tareau Cliffs, La Franchetti, April 13, 1966, R. J. Gagne.

Remarks.—It is difficult to distinguish this species from *H. dominicae* Blake except by comparison of the aedeagi. In general *H. dominicae* is larger and wider and more rounded, and not so distinctly punctate. In my description of *H. dominicae* I wrote that two specimens collected by R. H. Foote on Dominica, both females, were more distinctly punctate than the type specimen. I believe now that these may be *H. wirthi* although there is no certainty because they are both females.

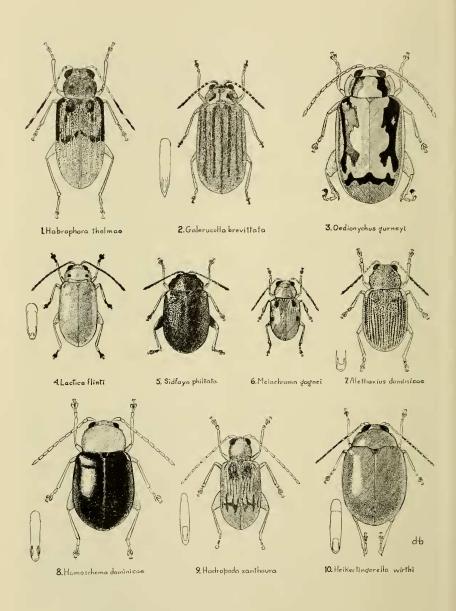
Sidfaya philtata, n. sp. (Fig. 5)

Ovate, moderately convex, shining black with yellowish brown mouthparts, antennae and legs, hind femora dark; densely and coarsely punctate; prothorax without depressions and with oblique anterior angles and an angularity at middle of sides.

Head with smooth polished occiput and a deep line on either side from above eyes to well marked frontal tubercles; interantennal area broad and extending a short way down front, lower front short and mouthparts somewhat declivous and pale. Antennae extending below humeri, 2 basal joints somewhat swollen, joints 3–7 pale and slender, apical joints thicker and darker. Prothorax moderately convex, anterior angles widely oblique, an angle at middle of side, and a small basal tooth; surface shining, black with coarse but not dense punctation. Scutellum dark. Elytra with sharp prominent humeri and slight basal umbone having a faint transverse depression below; surface shining black with coarser and denser punctation than on pronotum. Body beneath and hind femora shining black, nearly impunctate and glabrous. Length 2.4 mm; width 1.4 mm.

Type, female, USNM 69726 and two paratypes, both female.

Type locality.—1.6 miles west of Pont Casse, Dominica, April 24, 1964, O. S. Flint, Jr.; April 10, 1966, R. J. Gagne.



Remarks.—This is the third species of the genus to be described, the first being S. polutima Blake from Cuba, the second, S. punctatissima Blake from Jamaica. In its short broad prothorax and coarse elytral punctation this resembles the Jamaican species, but in its ovate shape it is more like the Cuban species. All three species are shining black with coarse, confused punctation, and the prothorax has broad oblique angles anteriorly and in the middle of the side a distinctive angularity.

Homoschema dominicae, n. sp. (Fig. 8)

Lustrous, head, prothorax, legs and antennae orange yellow, elytra bluish or greenish, often purplish, very finely punctate.

Head with wide set eyes, rounded occiput, a line of punctures from eyes to well developed frontal tubercles, a very short carina and short lower front of face. Antennae extending below humeri, basal joints swollen. Prothorax moderately convex with well rounded sides and oblique anterior angles and small tooth at basal angles, basal margin nearly straight; disc nearly impunctate, lustrous orange yellow. Scutellum dark brown. Elytra lustrous greenish or purplish blue, moderately convex with transverse depression below basal callosities; very finely and inconspicuously punctate. Body beneath with abdomen and sometimes breast brown; hind legs with swollen femora. Length 2.3–2.6 mm; width 1.3–1.5 mm.

Type, male, and eight paratypes, USNM 69727.

Type locality.—Mero, Dominica, collected by O. S. Flint, Jr., 24 July 1963.

Remarks.—This is one of the smaller species of Homoschema and with its dark abdomen akin to H. nigriventrum Blake from Puerto Rico, although the aedeagus is more like that of H. jamaicense Blake.

NEW SPECIES OF NEOACARUS HALBERT AND VOLSELLACARUS COOK FROM NORTH AMERICA¹

(ACARINA: NEOACARIDAE)

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Cook (1963) described four species of *Neoacarus* and the new neoacarid genus *Volsellacarus* from the interstitial waters of North America. The present study² adds two new species of *Neoacarus* and one new species of *Volsellacarus*, all from the ground water habitat. In presenting measurements in this paper, those of the holotype and

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